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Prosise et al.(10) **Patent No.:** **US 6,716,462 B2**
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TRADITIONAL SNACK FOODS**(75) Inventors: **Robert Lawrence Prosise**, Cincinnati, OH (US); **Christopher Randall Beharry**, Cincinnati, OH (US); **Joseph James Elsen**, St. Bernard, OH (US); **Ralph Lawrence Helmers, Jr.**, Cincinnati, OH (US); **Jeffrey John Kester**, West Chester, OH (US); **Raymond Louis Niehoff**, West Chester, OH (US); **Robert Joseph Sarama**, Loveland, OH (US); **Susana Rosa Waimin Siu**, Cincinnati, OH (US); **Thomas Joseph Wehmeier**, Cincinnati, OH (US); **Vince York-Leung Wong**, Hamilton, OH (US)(73) Assignee: **Mid-America Commercialization Corporation**, Manhattan, KS (US)

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3,751,569 A	8/1973	Erickson	
4,005,195 A	1/1977	Jandacek	
4,112,123 A	9/1978	Roberts	
4,338,346 A	7/1982	Brand	
4,399,163 A	8/1983	Brennan et al.	
4,411,925 A	10/1983	Brennan et al.	
4,423,029 A	12/1983	Rizzi	
4,668,525 A	5/1987	Creswick	
4,680,193 A	7/1987	Lunder et al.	
4,789,664 A	12/1988	Seligson et al.	
4,832,971 A	5/1989	Michnowski	
4,859,475 A	* 8/1989	Michnowski	426/72
4,900,566 A	* 2/1990	Howard	426/72
4,935,256 A	6/1990	Tsai	
5,051,270 A	9/1991	Ueda et al.	
5,061,508 A	10/1991	Schur	
5,132,113 A	7/1992	Luca	
5,242,697 A	9/1993	Luca	

5,262,190 A	11/1993	Cunningham et al.	
5,490,999 A	2/1996	Villagran et al.	
5,643,623 A	7/1997	Schmitz et al.	
5,834,044 A	11/1998	Schmitz et al.	
5,879,733 A	3/1999	Ekanayake et al.	
6,207,203 B1	3/2001	Atkinson et al.	
2002/0037355 A1 *	3/2002	Wong et al.	426/633

FOREIGN PATENT DOCUMENTS

EP	0 434 025	6/1991
EP	0 588 600	3/1994
GB	2178637 A	6/1985
WO	WO 98/13056	4/1998
WO	WO 99/08546	2/1999
WO	WO 99/12030	3/1999

OTHER PUBLICATIONSPennington, J., *Bowes & Church's Food Values of Portions Commonly Used*, 17th edition, 1998, Lippincott, Philadelphia).Adam Drewnowski, *Trends in Food Science & Technology*, Apr., 1992.

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Troller, J.A. 1980, Influence of Water Activity on Microorganisms in Foods, *Food Technology*, 34:76-80.Lemon, P. (1998) Effects of exercise on dietary protein requirements, *International Journal of Sport Nutrition*, 8:426-447.Crouse, J.R. et al., *Arch Intern Med*, 1999, 159:2070-2076 (Pike, R.L. and Brown, M.L., 1975, *Nutrition: An Integrated Approach*, 2nd ed., Wiley, New York).Garrison, R. and Somer, E., *The Nutrition Desk Reference*, 3rd edition, 1995, Keats Publishing, New Cannan, CT).*The Surgeon General's Report on Nutrition and Health*, 1988, U.S. Department of Health and Human Services Publication No. 88-50210, Washington, DC.National Research Council, 1989, *Diet and Health: Implications for Reducing Chronic Disease Risk*, The Committee on Diet and Health, National Academy Press, Washington, DC).

(List continued on next page.)

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(57) **ABSTRACT**

Appealing traditional nutritious snacks and mixes from which consumers can prepare appealing traditional nutritious snacks are disclosed. These snacks and mixes offer an alternative to appealing but unhealthy snacks. The nutritious snacks of the present invention are traditional in form, provide a balanced mix of an amino acid source, fat, and carbohydrates and typically have an appeal similar to that of unhealthy snacks of similar form. Thus, the snacks and snack mixes of the present invention resolve the dilemma that consumers are currently faced with—healthy eating or enjoying what you eat. Processes for making and methods of using appealing traditional nutritious snacks and mixes from which consumers can prepare appealing traditional nutritious snacks are also disclosed.

35 Claims, No Drawings